

## IL-7

### Interleukin 7

human, recombinant, *E. coli*

Cat. No.	Amount
PR-468	10 µg

For *in vitro* use only  
Quality guaranteed for 12 months  
Store at -20°C

#### Avoid freeze / thaw cycles

#### Form

Lyophilized.

#### Solubility

It is recommended to reconstitute the lyophilized IL-7 in bidist H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

#### Activity

ED<sub>50</sub>: < 0.5 ng/ml, corresponding to a specific activity 2 x 10<sup>7</sup> IU/mg, determined by the dose-dependent stimulation of murine IXN/2B cells.

#### Endotoxin

Less than 0.1 ng/µg (IEU/µg) of IL-7.

#### Purity

≥ 98% by SDS-PAGE, RP-HPLC, and FPLC.

#### Description

Interleukin-7 (IL-7) plays an essential role in the development and maintenance of T lymphocytes, and it was appreciated that the T-cell also requires IL-7 after leaving the thymus for homeostatic survival and proliferation.

Recombinant human IL-7 produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 172 amino acids and having a molecular mass of 17.412 kDa.

IL-7 is purified by proprietary chromatographic techniques.

#### Selected References:

- Jiang et al. (2004) Distinct regions of the interleukin-7 receptor regulate different Bcl2 family members. *Mol. Cell. Biol.* **24**:6501.
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- Kroemer R.T. and Richards W.G. (1996) Homology modeling study of the human interleukin-7 receptor complex. *Protein Eng.* **9**:1135.
- Grzegorzewski et al. (1996) Quantitative and cell-cycle differences in progenitor cells mobilized by recombinant human interleukin-7 and recombinant human granulocyte colony-stimulating factor. *Blood.* **88**:4139.
- Kroemer et al. (1996) Prediction of the three-dimensional structure of human interleukin-7 by homology modeling. *Protein Eng.* **9**:493.
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- Kim et al. (1994) Consequences of stable transduction and antigen-inducible expression of the human interleukin-7 gene on tetanus-toxin-specific T cells. *Hum. Gene Ther.* **5**:1457.